

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the applications.

**Listing of the Claims:**

1-82. (Canceled)

83. (Currently Amended) A quality control method for assessing the equivalency of a test batch of an herbal composition to a standardized batch of the same or substantially same herbal composition, wherein the herbal composition comprises multiple chemical components derived from one or more whole plants or plant parts, said quality control method comprising:

- (a) selecting a preparation of an herbal composition to be the standardized batch;
- (b) characterizing an Herbal BioResponse (HBR) Array for the standardized batch by
  - (i) exposing a characterized biosystem to the standardized batch, determining a differential gene expression profile as compared with an untreated control of the characterized biosystem by using a genomic-based bioassay method, and obtaining an array of gene expression changes for two or more molecular markers genes for the standardized batch; and
  - (ii) storing the array of gene expression changes obtained in step (b)(i) into a Standardized HBR Array;
- (c) characterizing an Herbal BioResponse (HBR) Array for the test batch by
  - (i) exposing the characterized biosystem used in step (b)(i) to the test batch, determining the differential gene expression profile compared with an untreated control of the characterized biosystem by using a genomic-based bioassay method, and obtaining an array of gene expression changes for two or more molecular markers genes for the test batch; and
  - (ii) storing the array of gene expression changes obtained in (c)(i) into a Test HBR Array;

(d) assessing a quantitative similarity value between the Standardized HBR Array and the Test HBR Array by comparing gene expression intensities and gene expression patterns; and  
(e) utilizing the similarity value obtained in step (d) to assess the equivalency of the test batch and the standardized batch for the purpose of quality control.

84. (Currently Amended) The method of claim 83, wherein the characterized biosystem is selected from the group consisting of cells, tissues, organs, and whole organisms and *in vitro* assays.

85-86. (Canceled)

87. (Previously Presented) The method of claim 83, wherein the quantitative similarity value is calculated using normalized values of the Standardized HBR Array and the Test HBR Array.

88. (New) The genomic-based bioassay method of claim 83 is selected from the group consisting of gene microarrays, polymerase chain reaction (PCR), cDNA arrays, and oligonucleotide arrays.